



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

JW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,048	08/19/2003	Rex Hyde	MD-278 - Hyde et al.	5135
1342	7590	09/29/2005	EXAMINER	
PHILLIPS LYTLE LLP INTELLECTUAL PROPERTY GROUP 3400 HSBC CENTER BUFFALO, NY 14203-3509			KISS, ERIC B	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/644,048	HYDE ET AL.	
	Examiner Eric B. Kiss	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 August 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. Claims 1-4 have been examined.

### *Specification*

2. The use of trademarks, such as IBM (where used as an adjective, rather than as the name of the company by itself), RATIONAL, LABVIEW, and EXCEL, has been noted in this application. Trademarks should be capitalized wherever they appear (capitalize each letter or accompany each trademark with an appropriate designation symbol, e.g., ™ or ®) and be accompanied by the generic terminology (use trademarks as adjectives modifying a descriptive noun).

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The trademarks in claims 3 and 4 have no fixed technical meaning but rather convey flexible meanings that may change at the pleasure of the respective owners. Accordingly, their

Art Unit: 2192

use in claims 3 and 4 renders these claims indefinite. Further, trademarks can only be properly used to specify the source of a particular product, not the product itself. As such, the trademarks cannot be used to properly incorporate any special technical features of any so-labeled products into the claims. In the interest of compact prosecution, the Examiner subsequently interprets “IBM Rational Test RealTime” as a software package that provides structural coverage analysis capabilities, and “an “Excel spreadsheet” as a software package that provides spreadsheet capabilities. These interpretations are made merely to assign an ascertainable scope to the claims in order to permit examination on the merits and are not intended to suggest that the trademarks are generic names used in trade.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by William Aldrich, “Using Model Coverage Analysis to Improve the Controls Development Process,” AIAA Modeling and Simulation Technologies Conference and Exhibit, August 2002, Monterey, California, 11 pages (hereinafter *Aldrich*).

As per claim 1, *Aldrich* discloses providing RBT test cases with associated inputs and outputs (see, for example, section 7.1 on pp. 6-8); providing a structural coverage test tool (see,

for example, section 7.1 on pp. 6-8); converting said inputs and outputs to acceptable formats for said coverage test tool (see, for example, section 7.1 on pp. 6-8); supplying such converted inputs and outputs to said coverage test tool (see, for example, section 7.1 on pp. 6-8); and operating said coverage test tool (see, for example, section 7.1 on pp. 6-8); thereby to determine the level of structural coverage of such converted RBT test cases (see, for example, section 7.1 on pp. 6-8).

As per claim 2, *Aldrich* further discloses the RBT test cases being written to verify or validate target code (see, for example, section 7.1 on pp. 6-8).

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Aldrich* in view of “MATLAB digest,” July 2002, vol. 10, no. 4 (hereinafter *Digest*).

As per claim 3, although *Aldrich* fails to expressly disclose the structural coverage test tool being “IBM Rational Test RealTime” (a software package that provides structural coverage analysis capabilities), *Digest* suggests that such a tool is known to work with the disclosed Simulink and Stateflow software tools to provide code-based testing. Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to

utilize such a product with the software described by *Aldrich* in order to gain the advantages of additional code-based testing features provided by the additional coverage analysis product described in *Digest*.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Aldrich* in view of Usha Santhanam, "Automating Software Module Testing for FAA Certification," ACM, Proceedings of the 2001 annual ACM SIGAda international conference on Ada, 2001, pp. 31-38 (hereinafter *Santhanam*).

As per claim 4, although *Aldrich* fails to expressly disclose said inputs and outputs being provided to an "EXCEL spreadsheet" (a software package that provides spreadsheet capabilities), *Santhanam* teaches the use of such a spreadsheet product to store and process inputs and outputs associated with requirements-base testing (see, for example, section 2.2 on pp. 31-32 and section 4.1 on pp. 32-34). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to incorporate the use of such a spreadsheet product as suggested in *Santhanam* with the teachings provided by *Aldrich*. One would be motivated to do so to facilitate easier test case generation.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist:  
571-272-2100.

EBK /EBK  
September 19, 2005



TUAN DAM  
SUPERVISORY PATENT EXAMINER